## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Curran; et al. : Art Unit: 1656

Serial No. 10/078,927 : Examiner: David J. Steadman

Filed: February 19, 2002 : Attv Docket: SJ-01-0032

For: Cyclin Dependent Kinase 5 :

Phosphorylation of Disabled 1

Protein

## REPLY BRIEF UNDER 37 C.F.R. $\pm$ 1.193(b)(1)

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Commissioner for Patents
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This Reply Brief is filed pursuant to 37 CFR § 1.193(b)(1) and is filed in response to the Examiner's Answer of February 1, 2010, the Examiner's Answer being in response to an Appeal Brief filed November 25, 2009.

## The Preamble and Wherein Clause are Limiting Elements of the Claimed Invention

The Examiner has conceded the combination of prior art references does not appear to explicitly teach or suggest phosphorylation of Dab1 by Cdk5 only at residues Ser491 and Ser515 (Examiner's Answer dated 02/01/10, page 12, last paragraph). Appellants maintain this information is critical in the practice of the invention, which requires an association of Dab1 phosphorylation with Cdk5 activity according to the preamble and wherein clauses of claims 36 and 38. If the preamble and wherein clauses of these claims are found to be limiting, then the outstanding obviousness rejection must fail according to the Examiner's own concession.

The Examiner's Answer fails to provide any additional support for the contention the preamble and wherein clauses of claims 36 and 38 are not a limiting element of the claimed method. Appellants maintain these clauses do represent a limiting element of the claims for all the reasons set for in their Appeal Brief. In addition, Appellants have reviewed the prosecution history and found additional evidence to support their position.

On pages 22-23 of the Office Action dated 08/06/2007, the Examiner asserted the claims were not enabled by questioning whether Dab1 was specifically phosphorylated by Cdk5. The

Examiner cited Takeo (Int. J. Dev. Biol. 38:185-191, 1994) for support, asserting that this reference showed that cdc2 is a mitotic serine/threonine kinase that would be encompassed by the instant specification's definition of "Cdk5". While Appellants successfully rebutted this assertion, it is clear from this rejection that the Examiner recognized specific phosphorylation of Dab1 by Cdk5 as a critical element of the claims. Having recognized this as a limiting element of the claims for purposes of enablement, it is inconsistent for this element to be ignored for purposes of considering obviousness as the Examiner has done.

In order to overcome this enablement rejection the Appellants were required to distinguish the Cdk5 recited in the preamble and wherein clauses of the claims from the cdc2 taught by the Takeo reference. This provides further proof that these clauses represent a limiting element of the claims. As stated in MPEP2111.02, a "preamble may provide context for claim construction, particularly, where... that preamble's statement of intended use forms the basis for distinguishing the prior art in the patent's prosecution history." *Metabolite Labs., Inc. v. Corp. of Am. Holdings*, 370 F.3d 1354, 1358-62, 71 USPQ2d 1081, 1084-87 (Fed. Cir. 2004).

## Conclusion

Appellants maintain the Examiner has failed to carry the burden of establishing the claims are not patentable because he has failed to establish the claims are obvious. For these reasons, presented in Appellants' Brief and summarized herein, Appellants respectfully request that the rejections be reversed.

Respectfully submitted.

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Date: March 4, 2010